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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,505	12/22/2000	Yuergen Boehmke	00255	9772

7590   09/12/2003

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EXAMINER
TAYLOR, BARRY W

ART UNIT	PAPER NUMBER
2643	5

DATE MAILED: 09/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

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	Application No.	**Applicant(s)**
Office Action Summary	09/746,505	BOEHMKE ET AL
	Examiner	**Art Unit**	
	Barry W Taylor	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-50* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

　　If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____ .

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

　　a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4)☐ Interview Summary (PTO-413) Paper No(s). _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____ .

U.S. Patent and Trademark Office

PTOL-326 (Rev. 04-01)　　　　　**Office Action Summary**　　　　　Part of Paper No. 5

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

1.   Claims 1-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Anand (5,426,688) in view of Dulman (6,018,567).

Regarding claim 1, 16, 18-19, 35, 37-38, 42, 44 and 46. Anand teaches a

system for capturing call processing failures in a telecommunication system occurring,

comprising:

establishing a communication link between a computing system and the

telecommunication system (see figure 1 wherein the Switching Control Center #76

establishes a communication link between a computing system (MCC #72 figure 1) and

the telecommunication system (#14, #16, #18, #20, #38 and #40 figure 1);

Anand does not explicitly show capturing call processing failure data occurring at

the telecommunication switch control processor.

Dulman teaches an arrangement for monitoring operations of intelligent elements

of a public switched telephone network by using a Maintenance and Operations

Console (MOC) that sends and receives standardized network management messages

(SNMP protocol) across a data network that provides flexible monitoring of intelligent

elements at different locations based on the use of SNMP object base (entire

disclosure). Dulman discloses that the MOC monitors and detects errors in hardware,

software, and software subsystems of an intelligent network element by receiving

SNMP protocol messages form the intelligent element (columns 2-3). Dulman discloses

the switching offices (#10 figures 1-2) are programmed to recognize identified events or

points in call (PICs). Dulman discloses various alarms received from intelligent

elements (columns 9-13). Dulman discloses using middleware monitor (see 66 figure

4C) used to detect errors in additional subsystems in the intelligent element so that all

application systems may be monitored even though vendors fail to supply SNMP

compliant elements (column 14). Dulman also discloses that sub-agents in the

intelligent elements generate traps immediately upon detection of critical errors (column

14). Dulman discloses the MOC also comprises an object mapping system having a

management information base (see MIB #70 figure 4C) that identifies object

relationships for the object-based models of the network. For example, the SNMP

agent may determine that the SNMP object identifies an AIX error "CPU utilization threshold exceeded" (column 15). Dulman further discloses that the MIB stores icon objects that have predetermined shapes and colors for identifying trap severity by icon colors (columns 15-16).

It would have been obvious for any one of ordinary skill in the art at the time of the invention to modify the invention as taught by Anand to use SNMP protocol messages as taught by Dulman for the benefit of monitoring and detecting errors in hardware and software for any network element as taught by Dulman.

Regarding claims 2, 17, 20, 36, 43, 47 and 50. Anand does not show capturing the call processing failure data occurring at the telecommunication switch control processor in real-time.

Dulman teaches an arrangement for monitoring operations of intelligent elements of a public switched telephone network by using a Maintenance and Operations Console (MOC) that sends and receives standardized network management messages (SNMP protocol) across a data network that provides flexible monitoring of intelligent elements at different locations based on the use of SNMP object base (entire disclosure). Dulman discloses that the MOC monitors and detects errors in hardware, software, and software subsystems of an intelligent network element by receiving SNMP protocol messages form the intelligent element (columns 2-3). Dulman discloses the switching offices (#10 figures 1-2) are programmed to recognize identified events or points in call (PICs). Dulman discloses various alarms received from intelligent

elements (columns 9-13). Dulman discloses using middleware monitor (see 66 figure 4C) used to detect errors in additional subsystems in the intelligent element so that all application systems may be monitored even though vendors fail to supply SNMP compliant elements (column 14). Dulman also discloses that sub-agents in the intelligent elements generate traps immediately upon detection of critical errors (column 14). Dulman discloses the MOC also comprises an object mapping system having a management information base (see MIB #70 figure 4C) that identifies object relationships for the object-based models of the network. For example, the SNMP agent may determine that the SNMP object identifies an AIX error "CPU utilization threshold exceeded" (column 15). Dulman further discloses that the MIB stores icon objects that have predetermined shapes and colors for identifying trap severity by icon colors (columns 15-16).

It would have been obvious for any one of ordinary skill in the art at the time of the invention to modify the invention as taught by Anand to use SNMP protocol messages as taught by Dulman for the benefit of monitoring and detecting CPU utilization threshold exceeded as taught by Dulman.

Regarding claims 3, 21, 40 and 45. Anand teaches providing call processing failure data to an output device coupled to the computing system (col. 4 line 67 – col. 5 line 30, col. 6 lines 40-46, col. 7 lines 25-67).

Regarding claims 4, 22 and 41. Anand shows wherein the providing the captured data to an output device includes providing the captured data to any output device (see Critical Indicator Panel #82 figure 1 and Control Console #84 figure 1).

Regarding claims 5-6 and 23-24. Anand does not explicitly show wherein the captured data are provided to the output device in response to user-selected criteria.

Dulman teaches an arrangement for monitoring operations of intelligent elements of a public switched telephone network by using a Maintenance and Operations Console (MOC) that sends and receives standardized network management messages (SNMP protocol) across a data network that provides flexible monitoring of intelligent elements at different locations based on the use of SNMP object base (entire disclosure). Dulman discloses that the MOC monitors and detects errors in hardware, software, and software subsystems of an intelligent network element by receiving SNMP protocol messages form the intelligent element (columns 2-3). Dulman discloses the switching offices (#10 figures 1-2) are programmed to recognize identified events or points in call (PICs). Dulman discloses various alarms received from intelligent elements (columns 9-13). Dulman discloses using middleware monitor (see 66 figure 4C) used to detect errors in additional subsystems in the intelligent element so that all application systems may be monitored even though vendors fail to supply SNMP compliant elements (column 14). Dulman also discloses that sub-agents in the intelligent elements generate traps immediately upon detection of critical errors (column 14). Dulman discloses the MOC also comprises an object mapping system having a management information base (see MIB #70 figure 4C) that identifies object relationships for the object-based models of the network. For example, the SNMP agent may determine that the SNMP object identifies an AIX error "CPU utilization

threshold exceeded" (column 15). Dulman further discloses that the MIB stores icon objects that have predetermined shapes and colors for identifying trap severity by icon colors (columns 15-16).

It would have been obvious for any one of ordinary skill in the art at the time of the invention to modify the invention as taught by Anand to use SNMP get command as taught by Dulman (column 13) for the benefit of using traps to cause the MOC to poll intelligent agents.

Regarding claims 7, 25 and 39. Anand does not show using TCP/IP communication link.

Dulman teaches an arrangement for monitoring operations of intelligent elements of a public switched telephone network by using a Maintenance and Operations Console (MOC) that sends and receives standardized network management messages (SNMP protocol) across a data network that provides flexible monitoring of intelligent elements at different locations based on the use of SNMP object base (entire disclosure). Dulman discloses that the MOC monitors and detects errors in hardware, software, and software subsystems of an intelligent network element by receiving SNMP protocol messages form the intelligent element (columns 2-3). Dulman discloses the switching offices (#10 figures 1-2) are programmed to recognize identified events or points in call (PICs). Dulman discloses various alarms received from intelligent elements (columns 9-13). Dulman discloses using middleware monitor (see 66 figure 4C) used to detect errors in additional subsystems in the intelligent element so that all

application systems may be monitored even though vendors fail to supply SNMP

compliant elements (column 14).   Dulman also discloses that sub-agents in the

intelligent elements generate traps immediately upon detection of critical errors (column

14). Dulman discloses the MOC also comprises an object mapping system having a

management information base (see MIB #70 figure 4C) that identifies object

relationships for the object-based models of the network. For example, the SNMP

agent may determine that the SNMP object identifies an AIX error "CPU utilization

threshold exceeded" (column 15). Dulman further discloses that the MIB stores icon

objects that have predetermined shapes and colors for identifying trap severity by icon

colors (columns 15-16).

It would have been obvious for any one of ordinary skill in the art at the time of

the invention to modify the invention as taught by Anand to use SNMP protocol

messages as taught by Dulman for the benefit of monitoring and detecting errors in

hardware and software for any network element via using a standardized transport

protocol, such as TCP/IP as taught by Dulman (column 4 line 53).

Regarding claims 8, 26 and 34. Anand does not explicitly show filtering .

Dulman teaches using a sieve daemon (see 94 figure 6) to perform filtering

functions.

It would have been obvious for any one of ordinary skill in the art at the time of

the invention to modify the invention as taught by Anand to use SNMP protocol

messages as taught by Dulman for the benefit of monitoring and detecting errors via

using the sieve daemon as taught by Dulman (figure 6 and column 16).

Regarding claims 9-12 and 27-30. Anand does not show using first and second

set of logic instructions.

Dulman teaches using an UNIX server in the computing system (#32 figure 4B).

It would have been obvious for any one of ordinary skill in the art at the time of

the invention to modify the invention as taught by Anand to use SNMP protocol

messages as taught by Dulman for the benefit of using an open environment for

monitoring and detecting errors in telecommunication system as taught by Dulman.

Regarding claims 13-14, 31-32 and 48. Anand does not explicitly show

analyzing the captured call processing failure data.

Dulman teaches an arrangement for monitoring operations of intelligent elements

of a public switched telephone network by using a Maintenance and Operations

Console (MOC) that sends and receives standardized network management messages

(SNMP protocol) across a data network that provides flexible monitoring of intelligent

elements at different locations based on the use of SNMP object base (entire

disclosure). Dulman discloses that the MOC monitors and detects errors in hardware,

software, and software subsystems of an intelligent network element by receiving

SNMP protocol messages form the intelligent element (columns 2-3). Dulman discloses

the switching offices (#10 figures 1-2) are programmed to recognize identified events or

points in call (PICs). Dulman discloses various alarms received from intelligent

elements (columns 9-13). Dulman discloses using middleware monitor (see 66 figure

4C) used to detect errors in additional subsystems in the intelligent element so that all

application systems may be monitored even though vendors fail to supply SNMP

compliant elements (column 14).   Dulman also discloses that sub-agents in the

intelligent elements generate traps immediately upon detection of critical errors (column

14). Dulman discloses the MOC also comprises an object mapping system having a

management information base (see MIB #70 figure 4C) that identifies object

relationships for the object-based models of the network. For example, the SNMP

agent may determine that the SNMP object identifies an AIX error "CPU utilization

threshold exceeded" (column 15). Dulman further discloses that the MIB stores icon

objects that have predetermined shapes and colors for identifying trap severity by icon

colors (columns 15-16).

It would have been obvious for any one of ordinary skill in the art at the time of

the invention to modify the invention as taught by Anand to use SNMP get command as

taught by Dulman (column 13) for the benefit of using traps to cause the MOC to poll

intelligent agents.

Regarding claims 15, 33 and 49. Anand does not show maintaining the call

processing failure data and logging administration data associated with the captured call

processing data to the storage device.

Dulman teaches an arrangement for monitoring operations of intelligent elements

of a public switched telephone network by using a Maintenance and Operations

Console (MOC) that sends and receives standardized network management messages

(SNMP protocol) across a data network that provides flexible monitoring of intelligent elements at different locations based on the use of SNMP object base (entire disclosure). Dulman discloses that the MOC monitors and detects errors in hardware, software, and software subsystems of an intelligent network element by receiving SNMP protocol messages form the intelligent element (columns 2-3). Dulman discloses the switching offices (#10 figures 1-2) are programmed to recognize identified events or points in call (PICs). Dulman discloses various alarms received from intelligent elements (columns 9-13). Dulman discloses using middleware monitor (see 66 figure 4C) used to detect errors in additional subsystems in the intelligent element so that all application systems may be monitored even though vendors fail to supply SNMP compliant elements (column 14). Dulman also discloses that sub-agents in the intelligent elements generate traps immediately upon detection of critical errors (column 14). Dulman discloses the MOC also comprises an object mapping system having a management information base (see MIB #70 figure 4C) that identifies object relationships for the object-based models of the network. For example, the SNMP agent may determine that the SNMP object identifies an AIX error "CPU utilization threshold exceeded" (column 15). Dulman further discloses that the MIB stores icon objects that have predetermined shapes and colors for identifying trap severity by icon colors (columns 15-16).

It would have been obvious for any one of ordinary skill in the art at the time of the invention to modify the invention as taught by Anand to use SNMP protocol

messages as taught by Dulman for the benefit of monitoring and detecting errors in

hardware and software for any network element as taught by Dulman.

2.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Barry W. Taylor whose telephone number is (703) 305-

4811. The examiner can normally be reached on Monday-Friday from 6:30am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Curtis Kuntz can be reached on (703) 305-4708. The fax phone number for

this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to Technology Center 2600 customer service Office

whose telephone number is (703) 306-0377.

CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600